



# Falls Injury Brief

## Injury Prevention & Control Program

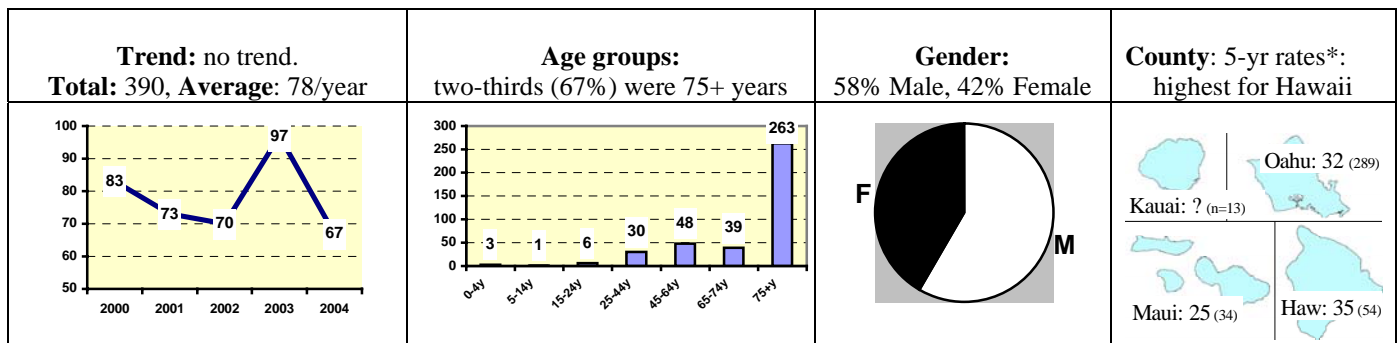
### Overview of Fatal Injuries

*Annual crude rate (1999-2002):* 5.8 deaths per 100,000 residents (5.1/100,000 for rest of U.S.)

*Hawaii state ranking (1999-2002):* 23<sup>rd</sup> highest (WI highest: 12.2/100,000, AK lowest: 2.6/100,000)

*Injury ranking (2000-2004):* 2<sup>nd</sup> leading cause of fatal injuries, leading cause of unintentional

There was no trend in the annual number of fatal falls among residents, which averaged 78 per year. The 5-year total of 390 deaths made falls the leading cause of fatal unintentional injuries in Hawaii over 2000-2004. Most (77%) of the victims were aged 65 years or older, and the risk of falls increased dramatically with age from 65 years onward. Forty-two percent of the victims were females, the highest such proportion among the main injury categories. Gender was equally distributed (50% female, 50% male) among victims aged 65 years and older.



\*Unadjusted rates per 100,000 residents over the 2000-2004 period. The number of deaths is shown in parentheses.

### Fatal Falls Among Seniors

Falls were by far the leading cause of fatal injuries among senior-aged residents in Hawaii, accounting for more than one-third (36%) of the total. Both the number and rate of fatal falls increased steadily across the older age range: 5-year rates among residents aged 85 and older were almost 15 times higher than rates among seniors aged 65-69 years (68/10,000 residents vs. 5/10,000). Rates among male seniors were higher than rates among female senior residents. Fatality rates among seniors were lowest for Kauai, although there were no significant differences between counties. Data on the cause of the fatal falls among seniors was of poor quality, as 42% were coded as “unspecified” causes. Over one-third (38%) of the deaths were due to falls “on the same level.”

### **Non-Fatal Hospitalizations**

For every senior resident who died from a fall, there were an estimated 41 who required hospitalization for falls which they ultimately survived, and another 60 who were treated in an emergency department. As with fatal falls, the number and rate of hospitalizations for falls increases dramatically with age over the senior age range. The distribution of gender is different, however, in that most (67%) of the patients are women. Forty-one percent of the patients suffered a fracture, most commonly fractures of the femur (14%). Hospital charges (not including physician charges) average almost \$60 million a year in Hawaii, and 61% of that is paid by Medicare/Medicaid. One third (33%) of these non-fatal falls were “on the same level” from “slipping, tripping or stumbling.” Sixteen percent were from “one level to another,” most commonly from beds (4%), stairs or steps (3%), and chairs (2%). Almost half (45%) of the falls were due to “other” or “unspecified” causes.

### **Oahu EMS Data**

EMS records were manually reviewed for more detail on the causes of falls among seniors. Although causes are probably multi-factorial in nature, an estimated 64% of the falls involved intrinsic, or personal, factors. Extrinsic, or environmental, factors were noted in about one-fourth (26%) of the EMS reports. The most common intrinsic factor was loss of balance, followed by transfer falls (mostly getting up from chairs, or out of beds). About three-fourths of the falls occurred in the home environment, most commonly the yard or other outside areas, or in bathrooms or bedrooms.